Renewable Energy Working Group
October 19, 2011
Open meeting

Welcome:
Anne Crawley, DOE FEMP, welcomed all participants to the meeting.

FLS Solar Thermal Project at Camp LeJeune:
Tyler Johnson of FLS Energy discussed FLS's capabilities and renewable energy projects on Marine Corps military bases. FLS Energy specializes in large-scale solar thermal projects. He noted solar thermal's cost effectiveness in comparison to photovoltaics. Mr. Johnson provided details on FLS's installation of solar thermal systems on 2,200 homes (1 panel and tank per home) at Camp LeJeune, Cherry Point, and New River Marine Corps military bases in North Carolina. The systems provide 75% of household hot water and reduce water heating costs by about 20%. The systems also have the added advantage of fixed, predictable energy costs. Installations are being added on about 80 homes per month. It is the largest project of its type in the country. The project includes a 50/50 mix of new construction and home retrofits.

The installations are occurring on homes that are part of public-private partnerships allowing the company to take advantage of tax incentives not available to the Federal government. In addition, in North Carolina, utilities will pay a rate for solar thermal energy. FLS Energy utilizes a Solar Energy Purchase Agreement, an alternative financing vehicle. Under this arrangement the client incurs no upfront costs as FLS Energy owns, operates, and maintains the systems. The contract term is 10 years.

FLS Energy has not implemented a similar project on Federal land; however potential Federal applications include facilities with large hot water loads such as correctional facilities, hospitals, and other large facilities.

The discussion included questions about potential installation on brownfields and issues related to maintaining the integrity of brownfield land. FLS has mainly been involved with PV installation on brownfields but expressed interest in helping to develop solar thermal projects on brownfields. Mr. Johnson noted that the DoD National Defense Reauthorization Act includes thermal resources and that there are creative ways to put together projects through that statutory goal. There was also discussion about renewable energy credits (RECs) and the sale of RECs as a means of financing projects. For the Camp LeJeune project, which is on privatized land, the RECs were sold to the utility Duke Energy. It was noted that for on-site Federal renewable energy projects, agencies must retain or replace RECs that are sold.

Green Building:
Anne Crawley (DOE FEMP) and Vicky Healey (DOE FEMP/NREL) provided highlights on a new FEMP guide on renewables and new construction. The guide is designed to assist with requirements for the Energy

Independence and Security Act of 2007 (EISA) including the solar hot water requirement, use of renewables to meet EISA sustainable design standards, and fossil fuel reduction standards. The *Guide to Integrating Renewable Energy into Federal Construction* went live on the FEMP website at the end of August[1]. Vicky Healy is the point of contact for the guide. It provides information on renewable energy options, selecting appropriate types of renewable energy technologies, and integrating these technologies into all phases of new construction or major renovation projects – particularly in the earliest planning phases. The guide is organized by phase of construction providing a roadmap through the process. The audience is expected to include project managers, budgeting staff, facility managers, and executive management. The guide is maintained on-line. The goal is to keep it updated, although effort will be taken to develop an easily printable version. Comments are welcome and encouraged. Please provide comments to Vicky or Anne.

Federal On-Site PPA Update:
Tracy Logan provided an update concerning Federal on-site PPAs. An announcement is about to come out that allows 3rd party constructed and operated renewable energy projects to be included in, or even the sole project in an ESPC as long as they meet the requirements of an ESPC. FEMP will develop checklists for these types of projects. More information is expected to be released in the next few weeks. Trainings will begin in a few months.

Other Topics & Short Highlights:
Anne Crawley discussed the requirements to remain as a Working Group and asked if there was value to the group to remain as a Standing Committee. Some benefits to the working group include:

- It is a source of continual learning.
- The informality of the meeting is a benefit.
- To date, the working group serves as an excellent means to share information.

Department of State commented that they deal a lot with distributed energy system and there is a need to address these in the working group. Some places include a requirement for 20% on-site CHP and 20% on-site renewable energy. The department also needs to deal with ground source heat pumps.

Next meeting:
The next Renewable Energy Working Group meeting will be held in January or early-February 2012.

[1] http://www1.eere.energy.gov/femp/reconstructionguide/index.html

Attendees (in-person):
Anne Crawley (DOE)
Tracy Logan (DOE)
Wayne Thalasinos (NASA)
Mary Heying (DOI)
David Comis (SRA)
Kevin DeGroat (Antares)
Dan Collinge (DOI)
Phyllis Stange (VA)
Mike Atsbaha (SRA)
Robert Avary (Travers/Avary Group LLC)
Thomas Heibel (BCS Inc., DOE Water Program)

Attendees (webinar/phone):
Cindy Ralph (DLA)
Matt Clouse (EPA)
CJ Cordova (VA)
Brian Kerr (DOT)
Karen Curran (GSA)
Guy Fisk
Dean Johnson (USDA)
Soudeh Motamedi
Ronald Peacock (OPM)
Ryan Guyer (DOS)
Vicky Healey (NREL)
John Bassler (WGES)
Beth Shearer (Beth Shearer & Associates)
Steve Krstulovich (LBNL)
Chandra Shah (NREL)
Gerald Robinson (LBL)
Mike Warwick (PNL)
David Zimmerman (TVA)
Heath Butler
Anneliese Schmidt (Antares)
Tyler Johnson (FLS)
Robi Robichaud (NREL)